REMARKS

The applicant thanks the Examiner for her time on June 22, 2010 to discuss the proposed new claims in the application. During that interview, the applicant reviewed reasons that new claim 27 was believed to be allowable in view of the prosecution history. The Examiner agreed with certain arguments, but stated that additional consideration may be required before she could comment on the patentability of new claim 27.

Claims 16, 17, 18 and 20 have been amended to correct grammatical errors.

Claims 27-31 have been added. New Claim 27 was drafted based on the currently allowed Claim 1 with amendments to delete certain limitations recited Claim 1. These amendments and the reasons for these amendments are outlined below. New Claim 27 is believed to be allowable for similar reasons as Claim 1. Claims 28-31 each add features to new claim 27 and are believed to be allowable due at least to their dependence on claim 27.

Reasons for removing "wherein the body and plunger are formed of plastic."

Claim 1 was amended in the Amendment filed on October 18, 2006 to include the limitation "wherein the body and plunger are formed of plastic." This amendment and corresponding arguments were presented to overcome the rejections in view of Leason *et al.* (U.S. Patent No.:

5,360,413, hereinafter referenced as "Leason"). However, the amendment and arguments were deemed unpersuasive (see Response to Arguments, page 3, Office Action dated November 16, 2006). A new reference, namely Tessman *et al.* (U.S. Patent No.: 6,210,372, hereinafter referenced as "Tessman") was applied to reject the "plastic" limitation of Claim 1. Claim 1 was amended further in a subsequent Amendment to overcome the rejections. Given that the amendments to limit the device to being "formed of plastic" did not appear to have any impact in overcoming the rejections in view of Leason and other cited references, removal of this limitation should not impact allowability of the claim in view of the references.

Reasons for removing "selected from the group consisting of the second end of the plunger and downstream of the first end of the body" and amending ", the port being connected to a downstream component."

Claim 1 was amended in the Amendment filed on May 15, 2007 to include the limitation "a port formed on the component selected from the group consisting of the second end of the plunger and downstream of the first end of the body, the port being connected to a downstream component." However, no arguments as how the addition of the port helps in overcoming the rejections were presented in the filed Amendment. Further, neither the Office Action mailed on September 10, 2007, nor any of the subsequent Office Actions consider the above limitation in the rejections applied to Claim 1.

Accordingly, the amendment to limit the device to having a port "from the group consisting of the second end of the plunger and downstream of the first end of the body" does not appear to have had any impact in the rejections applied to Claim 1. Therefore, it is believed that amending Claim 1 to recite "a port formed on the component ~~selected from the group consisting of the second end of the plunger and downstream of the first end of the body~~, the port being ~~connected~~ connectable to a downstream component," should not impact allowability of the claim in view of the references.

Note that, the limitation "the port being connected to a downstream component" is being amended to recite "the port being ~~connected~~ connectable to a downstream component." Since this amendment is merely applied to clarify the language of the claim, it should not have any impact on allowability of the claim in view of the references.

Reasons for removing "a cam slot formed in the body, a cam formed on an outer surface of the plunger and contained within the cam slot."

This limitation was also added in the Amendment filed on May 15, 2007. In response, the Examiner presented a new reference, namely Erskine *et al.* (U.S. Patent No. 5,820,614, hereinafter referenced as "Erskine"). In response, Applicants presented arguments describing that Erskine does not teach a cam and a cam slot and overcame the obviousness rejections in view of Leason, Tessman, and Erskine. The Examiner then cited a new reference,

namely Mackal (U.S. 2,859,932, hereinafter referenced as "Mackal").

In response to the Mackal reference, Applicant presented several arguments including amending the claims to include "one or more seals between the plunger and the bore to form a tight liquid seal between various portions of the plunger and the bore." This limitation is not taught by any of the cited references. Specifically, the Mackal reference relies on friction between its components to form a seal. Similarly, the Leason reference relies on friction between its piston and channel to form a seal. The Tessman reference also fails to teach this limitation of Applicants' Claim 1 since it employs a seal (i.e., comprehensive sleeve 140) between a cartridge 200 and a delivery cap 100 to establish a leak-proof connection between these components. Tessman offers no suggestion of employing "one or more seals between the plunger and the bore to form a tight liquid seal between various portions of the plunger and the bore." The Erskine reference also fails to teach these features since it merely describes using an "O ring" 66 to form a fluid tight seal between two valves.

During the telephonic interview, the Examiner suggested that Leason may anticipate this new claim. However, the present claim differs from Leason in several ways.

First, the present claim 27 recites that the body has a first end and a second end, and that the plunger has a first end and a second end corresponding to the ends of the body. In contrast, Leason discloses a plunger (24 in Figure 3)

that extends only a portion of the length of the body. In fact, in the open position (Figure 7), the plunger 24 is completely within the bore of the device. Therefore, Leason cannot be said to incorporate a plunger having first and second ends that correspond to the first and second ends of the body.

Furthermore, the present claim recites that one or more seals form a liquid tight seal between various portions of the plunger and the bore. This limitation also does not exist in Leason. When the device of Leason is in the closed position, it is disclosed that "wiper seal 25 acts to seal the top of channel 15 and inlet 6 when the piston is in its normal position" (Column 3, lines 16-18). However, when the device is in its open position, the stretchable element is pushed downward into the cavity. In this position, fluid flows between the plunger and the bore over the entire length of the bore. In contrast, the seals of the present invention serve to form a fluid tight seal in all instances. For example, Figure 2 of the present application shows the device in the open position. In this position, the seals continue to maintain a liquid tight seal between the plunger and the bore so that no fluid can travel the length of the bore. This feature does not exist within the device of Leason.

Claim 28 incorporates a handle on the plunger. Such a feature is not found in any of the references. Claim 29 recites a cam and cam slot. Again, these features are not disclosed in the prior art. Claim 30 incorporates the limitations of both claims 28 and 29. Finally, claim 30 explicitly recites that the seals continue to provide a

liquid tight seal even when the device is in the open position. As stated above, this limitation is not found in Leason.

Continued allowance of claims 1-26 is respectfully requested in view of the foregoing, as is the allowance of newly added claims 27-31.

Respectfully submitted,

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